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Of Commodore 128

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# ATARI

## Applying The Atari

by Jeff Brenner

Our feature program this month is a long one and will take some time to type in, but I think you'll enjoy it. I had to forcefully pull myself away from playing with it so I could write this month's column. Before we discover what this program is, let's answer some reader mail and take care of a few other matters.

### Reader Mail

Q. I have an Atari 800XL, the *AtariWriter* cartridge and a Gorilla Banana Printer. I understand there is some sort of utility floating around (a driver routine?) that makes the *AtariWriter* cartridge and the Banana more compatible. If you know anything about it, I would appreciate some information.

Jim Cassoutt  
Pensacola, FL

Originally, Atari was to distribute these "printer driver routines" for various printers through the Atari Program Exchange. However, the Atari Program Exchange has long been shut down and Atari users have since been complaining that they are unable to get these routines.

But there is still hope. A company called At-A-Glance (86 Ridgedale Avenue, Cedar Knolls, NJ 07927) produces a "Printer Formatted Data Disk," essentially the driver routine you are interested in. The price is \$14.95. The company claims that this program "will give you all the available options possible with your printer and *AtariWriter*." Their ad lists the availability of versions for the following dot-matrix printers: "BMC, C-ITOH, EPSON, GEMINI, LEGEND, OKIDATA, PANASONIC, ATARI, RITEMAN, CITIZEN, plus others." Hopefully, the "plus others" includes your Banana Gorilla.

I recommend that you write a letter to them before ordering to see whether a version is available specifically for your model.

Q. My wife and I have recently gotten involved in doing lineage charts (genealogical trees) of our families and

realized it would be so much simpler to do this on our computer (Atari 800XL).

Somewhere I remember seeing some software just for that purpose, but was disappointed to find it was for a computer other than my Atari. It may have been for a Commodore 64 but I'm not exactly sure of that. However, if you know of one for the Atari, please let me know or ask your readers if they know of such a program.

Darwin K. Garrison  
Lee's Summit, MO

Although I have seen several genealogical programs for other computers, I am sorry to say I am not familiar with any available for the Atari. The following companies have produced genealogical software for other computers:

Acorn Software Products, 7655  
Leesburg Pike, Falls Church,  
VA 22043: *Family Tree*

Array Systems, P.O. Box 295,  
Brigham City, UT 84302:  
*Treesearch*

Comsoft, 655 Maybell Avenue,  
Palo Alto, CA 94306: *Roots*

Quinsept, P.O. Box 216, Lex-  
ington, MA 02173: *Family  
Roots*

Soft-Gene, 11 John Swift  
Road, Acton, MA 01720:  
*Ancestry*

Wagstaff Computer Services,  
1050 E. 800 South, Provo, UT  
84601: *Family Ties*

Most of these addresses are more than a year old, and in that time versions might have been developed for the Atari. (Several of these companies have probably gone out of business during this time as well.) I recommend that you write to these companies and ask if an Atari version is available.

You also might be interested in the following companies:

Data Transfer Associates, Inc.,  
5102 Pommeroy Drive, Fair-  
fax, VA 22032, (703) 938-8490:  
Publishes bimonthly newslet-  
ter, *Genealogical Computing*  
National Genealogical Soci-  
ety's Computer Interest Group,  
1921 Sunderland Place, NW  
Washington, DC 20036

Posey Enterprises, P.O. Box  
338, Orem, UT 84057, (801)  
374-6168: Publishes quarterly  
*Genealogical Computer  
Pioneer*

If any readers produce or know of a genealogical pro-

>I'M CHECKING TO SEE IF YOU WORK PROPERLY.  
RAP: FOR HOW LONG HAVE YOU BEEN CHECKING TO SEE IF I WORK PROPERLY?

>I'VE JUST BEGUN.  
RAP: TELL ME MORE.

>YOU'RE BEING QUOTED FOR A MAGAZINE.  
RAP: WHY DO YOU THINK I AM BEING QUOTED FOR A MAGAZINE?

>BECAUSE I'M DOING THE QUOTING!  
RAP: IS IT REALLY BECAUSE YOU'RE DOING THE QUOTING?

>YES IT IS.  
RAP: ARE YOU CERTAIN?

>I'M ABSOLUTELY POSITIVE.  
RAP: ARE YOU WORRIED BECAUSE YOU ARE ABSOLUTELY POSITIVE?

>WHAT DO YOU MEAN?  
RAP: WHAT DO YOU THINK DO I MEAN?

>YOU GOT ME - DO YOU MIND IF I PRINT WHAT YOU ARE SAYING?  
RAP: DO YOU THINK I KNOW WHAT I AM SAYING?

>THAT'S TRUE - YOU ARE A COMPUTER PROGRAM.  
RAP: HAVE YOU EVER WANTED TO BE A COMPUTER PROGRAM?

>NEVER!  
RAP: NEVER AT ALL?

>THAT'S RIGHT.  
RAP: THAT IS INTERESTING - GO ON.

>CAN YOU THINK?  
RAP: DO YOU THINK I CAN THINK?

>THAT'S WHAT I AM TRYING TO FIND OUT.  
RAP: WHAT DO YOU THINK YOU ARE TRYING TO FIND OUT?

>I WANT TO SEE IF YOU CAN IMITATE HUMAN INTELLIGENCE.  
RAP: WHAT IF YOU CAN'T GET TO SEE IF I CAN IMITATE HUMAN INTELLIGENCE?

>THEN I MAY GET MAD AT YOU.  
RAP: IT'S UNHEALTHY TO BE ANGRY OFTEN.

>I SELDOM GET ANGRY.  
RAP: WHAT DOES ANGER DO TO YOU?

>I DON'T WANT TO DISCUSS THIS IN FRONT OF MY READERS.  
RAP: ARE YOU SURE YOU DON'T WANT TO DISCUSS THIS IN FRONT OF YOUR READERS?

>ABSOLUTELY SURE - INSTEAD I WANT TO GO FINISH MY COLUMN.  
RAP: IS THAT WHAT YOU REALLY WANT?

>YES, SO GOODBYE!  
RAP: IT'S BEEN A PLEASURE TALKING WITH YOU.

Figure 1  
"Conversation with RAP."

gram for Atari computers, please write and tell us.

Q. I've been having some problems with Atari's customer service. The problem concerns

their form letter and non-response, mostly. I bought a 130XE and I asked them simply how to access the additional

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## Tinka's Mazes

A Review by Jeff Brenner

Tinka's Mazes is one of the newest releases in Mindscape's Tink!Tonk! line of educational software. This program concentrates on developing basic mathematics skills, such as counting and addition. Like the other programs in the Tink!Tonk! series, Tinka's Mazes has demonstrated itself to be not only a valuable educational tool for the four- to eight-year old, but a charmingly entertaining piece of software as well.

### Getting Ready for School

In Tinka's Mazes, your child uses the joystick or keyboard to control Tinka, a small, colorful character from TinkTonk Land. After a lengthy introduction, Tinka's bedroom is

displayed complete with Tinka sleeping in bed in the center of the room. Pressing the space bar awakens Tinka, and the animated character jumps out of bed and races off to school. But there are two ways for Tinka to get to school, and your child has the choice: Tinka can go directly to school or through a maze of mathematics problems. Successfully navigating through the maze brings Tinka to school.

### Skill Levels

As an educational program, one of the nicest features of Tinka's Mazes is its multiple difficulty levels. Three skill levels are on the first side of the disk, and an additional skill level is on the back. These help to ensure that your child will

not quickly outgrow the program; as the child becomes more proficient at the skills presented, he can advance to the next difficulty level.

Level one deals with "less" and "more" problems. Two quantities of objects are displayed and the child is asked to choose which is more or which is less.

Level two concentrates on counting skills. Generally, a certain number of items are presented on the screen and the child is asked to type in the number that follows.

Level three presents additional counting problems and also drills your child on simple addition problems.

Level four contains varying skill levels within itself. This level basically drills your child on addition problems but a time aspect is added to the

game. The child must finish the maze in a certain amount of time to gain points and to advance to a higher grade level at the school.

### Through The Maze

If your child chooses to go through the maze, he will have to open "gates" to make his way to the end while avoiding the fast-moving "mazers" (on Level 4). A gate is opened by moving the Tinka character on top of it and answering the mathematics problem presented. Depending on the skill level being played, a "more" or "less" problem, a counting problem, or an addition problem will be presented using animal characters. On level three, for example, a

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## Applying The Atari

### Continued from page 59

memory that they have advertised and how to use it with their AtariWriter program. The reason I bought a 130XE was because I wanted the additional memory to keep more pages at a time in the computer. They sent me a form letter with the address of Atari associations in my area and no further response. I really got upset at that point and wrote a letter to the president and told him that I thought their "there's 130K available but you can't use it" philosophy was false advertising and Consumer Reports and the Federal Trade Commission ought to know about it. I got another "the user associations in your area are as follows:" form letter about one month later—really user-unfriendly if you compare this with their former helpfulness.

So much for preamble. Can you help me—how do you get the full 130K. I don't understand their instructions in their manual.

Terry Joslin  
Oakton, VA

It is unfortunate that it is so difficult to correspond with Atari, but you are one of the lucky ones. Many readers have complained that they have not received any response—not even a form letter. Ironically, calling Atari by phone gives a recording which tells the caller that the phone lines are too busy and suggests that the caller mail in his question. I had hoped that once Atari settled down with its new management, its toll-free "help" line would be set up again. But the new Atari has apparently remained negligent in the area of consumer support and I do hope this changes in the future.

Regarding your questions about the 130K RAM in the 130XE, the full 130K is indeed in your machine and 64K of it can be used as a RAM "disk drive." You can save data or programs to this area and then access them when desired. I intend to cover various aspects of Atari's newer computers in a future column.

Since AtariWriter was not designed with the 130XE in mind, it cannot access the additional memory. Therefore you must wait until a word processor is released that is compatible with the 130XE. AS of this writing I know of no 130K word processors for the Atari 130XE, but will inform you if I hear of one being developed.

## Newsletters

I recently received two more

well-designed newsletters from Atari user's groups. One is *Pokey*, printed by the Western New York Atari User's Group (P.O. Box 59, Buffalo, NY 14216). The other is *Bits, Bytes & Pieces Computer Digest* printed by the Bits, Bytes, & Pieces Atari user's group (1103 Arrowbend Drive, Williamson, NY 14589). If your user's group prints a regular newsletter, send it in and I'll try to mention it.

## Contributions

Readers are invited to submit short, original programs from which others may benefit. All readers whose contributions are printed will receive 3-D holograph stickers. Additionally, this month I have two cartridge games from Sega and from Epyx for the best original programs that are received and published. If you have any nifty little programs of your own creation that others will enjoy, send them in!

## Numeric Keypad Decoder

Several readers have requested an assembly listing of July's numeric keypad program. It is listed under the "Numeric Keypad Decoder Assembly Listing" heading for those who want to modify it for use with machine language programs, or for those simply interested in seeing more clearly how it works.

## Mailing List Update

I've gotten such a fantastic response to June's *Mailing List* program from readers who are using it that we'll begin adding more features to this program next month to make it even more practical. So far only one minor bug has surfaced. When searching for a name that does not exist, an error message will be generated. Add the following line:

935 TRAP 1000

This will cause the program

to print a "Name not found" message instead, and will allow you to continue. Some readers who have requested diskettes of this program will find that this line has already been added to the program.

## Response Analysis Program

Now the program that we've all been waiting for. It's called the *Response Analysis Program*, or *RAP* for short. It requires a minimum of 24K RAM.

Inspired by the program, *Eliza*, which was created at the Massachusetts Institute of Technology way back in 1966, *RAP* will sometimes startle you with apparently intelligent responses to your statements, or will make you laugh with its hilarious retorts. *Eliza* was a computer psychotherapist; *RAP* is the center of a rap session. Some have found that "talking" to such a program (as ridiculous as it sounds) has actually helped them to relieve some pressures and tensions.

Figure 1 gives you an idea of what *RAP* is all about. This is a sample conversation between me and the program. My entries are preceded by ">" while the program's responses are preceded by "RAP:." You can obviously have a lot of fun with this program.

The program has been divided into two parts, *Part I* (lines 10 through 1350) and *Part II* (lines 4960 through 5590) both with the heading, "Response Analysis Program." *RAP* is a long program, so you might want to enter it in over a period of several days. It's a good idea to use *Program Perfect* to enter this program to avoid making errors which will affect its operation. (See the end of this article for information on *Program Perfect*.)

Type in both parts of *RAP*. If you are using *Program Perfect*, first enter Part I. Then list this part to cassette or disk (LIST "C:" or LIST "D:PART1"). Now type NEW and reload *Program Perfect*.

Type 4960 for the "Starting line" prompt and begin entering Part II. When this part is completed, merge Part I with it by entering Part I from cassette or disk (ENTER "C:" or ENTER "D:PART1"). Now the entire program will be in memory, and you can SAVE it

to cassette or disk (CSAVE or SAVE "D:RAP.BAS"). You can also delete the Part I file from disk once you have saved the completed program.

RUN the program. The first display is the title screen,

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## RESPONSE ANALYSIS PROGRAM - PART I

```

10 REM RESPONSE ANALYSIS PROGRAM
20 REM COPYRIGHT 1985 JEFF BRENNER
30 DIM SUMS(128):LAST=5000:PRINT "STAND BY...":DELAY=5
40 TRAP 50:RESTORE LAST:READ SUMS:LAST=LAST+10:GOTO 40
50 KEYS=INT(LAST/10)-501
60 DIM INPS(128),RAPS(128),REVS(100),OLDS(128),SPS(10),MS(7),FINDS(77)
70 DIM THPS(128),V1S(20),V2S(20),REFS(KEYS),KEYS(20)
80 RESTORE 90:FOR I=1 TO 7:READ M:MS(I,1)=CHR$(M):NEXT I
90 DATA 32,211,212,193,210,212,32
100 FOR I=1 TO 77:READ M:FINDS(I,1)=CHR$(M):NEXT I
110 SPS(1)=CHR$(32):SPS(10)=CHR$(32):SPS(2)=SPS
120 REFS(1)=CHR$(0):REFS(10)=CHR$(0):REFS(2)=REFS
130 POKE 205,2:POKE 204,0:POKE 206,0
140 DATA 104,104,133,205,104,133,204,104,133,206,104,133,206,169,0,133
150 DATA 200,133,212,133,213,160,0,177,206,200,201,155,200,249,136,132
160 DATA 200,160,0,177,204,201,155,240,31,209,206,200,0,200,196,200
170 DATA 200,241,230,212,76,24,165,204,105,1,133,204,165,205,105,0
180 DATA 133,205,230,212,160,0,240,219,169,0,133,212,96
190 RESTORE 210:FOR I=1 TO 47:READ N:POKE 1535+I,N:NEXT I:A=USR(1572)
200 POKE 204,0:POKE 206,0
210 DATA 72,169,0,141,102,2,169,64,141,190,2,230,204,165,204,197
220 DATA 200,200,13,169,0,133,204,69,2,229,206,133,205,141,243,2
230 DATA 104,76,59,220,10,16,6,160,0,169,7,32,92,220,76
240 L=0:K=0:GRAPHICS 5:SETCOLOR 2,0,COLOR 1
250 OX=11:OY=39:RESTORE 300:PLOT OX,OY:FOR I=1 TO 37:READ X,Y:FOR J=0 TO 4
260 IF I=15 OR I=26 OR I=29 THEN PLOT X+J,Y:OX=X:OY=Y:GOTO 290
270 PLOT OX+J,OY:DRAWTO X+J,Y
280 IF PEEK(53279)=4 THEN SOUND 2,0,0,0:SOUND 3,0,0,0:GOTO 370
290 M=L+1+J:SETCOLOR 0,1,0
300 SOUND 0,M,10,0:SOUND 1,M+2,10,0:SOUND 2,M+3,10,0:SOUND 3,M+4,10,0
310 POKE 53760,1
320 NEXT J:OX=X:OY=Y:NEXT I:L=L+37:SOUND 2,0,0,0:SOUND 3,0,0,0
330 SOUND 0,255,10,0:SOUND 1,254,10,0:POKE 53760,1
340 PRINT SPS(0):"RESPONSE":SPS(7):"ANALYSIS":SPS(7):"PROGRAM"
350 POKE 752,1:POKE 656,3:POKE 457,10:PRINT "PRESS":MS(7):"TO BEGIN":
360 FOR I=0 TO 15:SETCOLOR 0,1,0:IF PEEK(53279)<6 THEN NEXT I:GOTO 360
370 SOUND 0,0,0,0:SOUND 1,0,0,0:OPEN #1,4,0,"E":GOTO 540
380 DATA 11,30,9,34,5,23,4,14,5,6,10,2,20,4,20,10,19,17,9,21
390 DATA 7,22,13,24,20,28,24,33,31,39,31,36,30,27,28,17,28,0,33,5
400 DATA 35,6,40,13,45,23,46,34,47,37,43,23,40,23,32,25,57,36,57,29
410 DATA 53,15,47,7,48,2,55,1,67,5,67,12,58,10
420 POKE 559,34:IF P<2 THEN 460
430 PRINT #2:"RAP: ":FOR I=1 TO LEN(RAPS)
440 IF RAPS(I,1)<>"/" THEN PRINT #2:RAPS(I,1):GOTO 450
450 NEXT I:PRINT #2:PRINT #2
460 RAPS(LEN(RAPS)+1)=CHR$(32)
470 C=0:FOR I=1 TO LEN(RAPS)
480 FOR J=0 TO LEN(RAPS)-1:IF RAPS(I+J,1)<>CHR$(32) THEN NEXT J
490 C=C+1:IF C>38 THEN PRINT CHR$(126):C=J
500 FOR K=1 TO I+J:SOUND 0,15,0,0:SOUND 0,0,0,0
510 IF RAPS(K,K)<>"/" THEN PRINT RAPS(K,K):
520 FOR D=1 TO DELAY:NEXT D:NEXT K
530 I=1+J:NEXT I:PRINT #2:RETURN
540 CLOSE #2:PRINT "WOULD YOU LIKE A PRINTOUT (Y/N)":INPUT THPS:P=0
550 IF THPS(1,1)<>"Y" THEN 500
560 P=1:TRAP 570:PRINT "TURN PRINTER ON.":OPEN #2,0,0,"P":GOTO 500
570 PRINT "PRINTER NOT READY.":GOTO 540
580 RAPS="I'M RAP.":GOSUB 420:RAPS="TALK TO ME BUT ANSWER IN ONE"
590 RAPS(LEN(RAPS)+1)="/" SENTENCE AT A TIME.":GOSUB 420
600 RAPS="WHEN YOU SEE THIS PROMPT: ":RAPS(LEN(RAPS)+1)=CHR$(27)
610 RAPS(LEN(RAPS)+1)=CHR$(127)
620 RAPS(LEN(RAPS)+1)="/" TYPE IN YOUR WORDS AND PRESS RETURN.":GOSUB 420
630 PRINT #2:IF P=1 THEN P=2
640 IF LEN(KEYS)>3 THEN IF KEYS(1,3)="BYE" THEN POKE 752,0:END
650 TRAP 1190:POKE 752,0:PRINT CHR$(27):CHR$(127):OLDS=INPS:INPUT #1:INPS
660 IF P THEN PRINT #2:"":INPS
670 POKE 559,0:IF LEN(INPS)<7 THEN 690
680 IF INPS(1,6)="SPEED=" THEN DELAY=VAL(INPS(7,LEN(INPS))):GOTO 1170
690 IF INPS=OLDS THEN 1140
700 THPS=INPS(LEN(INPS))
710 IF THPS<"A" OR THPS>"Z" THEN INPS=INPS(1,LEN(INPS)-1)
720 THPS=CHR$(32):THPS(LEN(THPS)+1)=INPS:INPS=THPS
730 INPS(LEN(INPS)+1)=CHR$(32):INPS(LEN(INPS)+1)=CHR$(155)
740 POKE 752,1:PRINT #2:INPS(LEN(INPS)+1)=SPS:LN=LEN(INPS):TOT=0
750 IF INPS(1,1)=CHR$(127) THEN INPS=INPS(2,LEN(INPS)):LN=LN-1
760 FOR D=1 TO LN-1:TOT=TOT+ASC(INPS(D,D))
770 IF INPS(D,D)=CHR$(39) THEN INPS(D)=INPS(D+1,LEN(INPS)):D=D+1
780 NEXT D
790 IF INPS=OLDS THEN 1140
800 IF INPS(5,5)<>"K" THEN 820
810 IF TOT=1009 AND LEN(INPS)=21 THEN 1160
820 AA=300:AKEY=0:RESTORE 1200:A=0:FOR KEY=1 TO KEYS-1
830 READ KEYS:IF KEYS="0" AND KEYS<"9" THEN LINE=VAL(KEYS):GOTO 830
840 KEYS(LEN(KEYS)+1)=CHR$(155):NM=0
850 A=USR(ADR(FINDS),ADR(INPS),ADR(KEYS)):POKE 205,2:POKE 204,0:POKE 206,0
860 IF A AND KEYS(1,LEN(KEYS)-1)="BYE" THEN 930
870 IF NM=0 AND A>0 AND A<AA THEN AA=A+LEN(KEYS)-1:AKEY=KEY:ALINE=LINE
880 IF A=0 OR INT(RND(0)*3)<1<3 THEN 900
890 AA=A+LEN(KEYS)-1:AKEY=KEY:ALINE=LINE:NM=1
900 READ KEYS:IF KEYS<"0" OR KEYS>"9" THEN 840
910 LINE=VAL(KEYS):NEXT KEY
920 IF AKEY>0 THEN A=AA:KEY=AKEY:LINE=ALINE
930 RESTORE 4960:REVS=INPS(A)
940 FOR I=1 TO 20:READ THPS,V2S:V1S=CHR$(32):V1S(LEN(V1S)+1)=THPS
950 V1S(LEN(V1S)+1)=CHR$(32):V1S(LEN(V1S)+1)=CHR$(155)
960 V2S(LEN(V2S)+1)=CHR$(32)
970 B=USR(ADR(FINDS),ADR(REVS),ADR(V1S)):POKE 205,2:POKE 204,0:POKE 206,0
980 IF B=0 THEN NEXT I:GOTO 1020
990 OLDS=REVS:B=LEN(V1S)-1
1000 REVS=REVS(1,B):REVS(LEN(REVS)+1)=V2S:REVS(LEN(REVS)+1)=OLDS
1010 GOTO 970
1020 IF LEN(REVS)<2 THEN 1060
1030 I=ASC(REVS(LEN(REVS)))
1040 IF I=155 OR I=32 THEN REVS=REVS(1,LEN(REVS)-1):GOTO 1020
1050 IF REVS(1,1)=CHR$(32) THEN REVS=REVS(2,LEN(REVS)):GOTO 1040
1060 L=ASC(REFS(KEY))
1070 RESTORE LINE+L:READ OLDS
1080 L=L+1:I=PEEK(183)+256:PEEK(184):IF I>LINE+9 THEN L=0:GOTO 1070
1090 REF=KEY:KEY=CHR$(L)
1100 IF ASC(OLDS(LEN(OLDS)-1))<43 THEN RAPS=OLDS:GOSUB 420:GOTO 630
1110 RAPS=OLDS(1,LEN(OLDS)-2):RAPS(LEN(RAPS)+1)=CHR$(32)
1120 RAPS(LEN(RAPS)+1)=REVS
1130 RAPS(LEN(RAPS)+1)=OLDS(LEN(OLDS)):OLDS=RAPS:GOSUB 420:GOTO 630
1140 RAPS="YOU ARE REPEATING YOURSELF."
1150 GOSUB 420:GOTO 630
1160 RAPS="SAME TO YOU, BUSTER!":GOSUB 420:GOTO 630
1170 RAPS="SPEED NOW AT ":RAPS(LEN(RAPS)+1)=STR$(DELAY)
1180 GOSUB 420:GOTO 630
1190 TRAP 1190:KEY=KEYS:RESTORE 1350:READ LINE,THPS:GOTO 1060
1200 DATA 5000,YOUR,ARE,5010,I AM,IM,5020,CAN YOU,5030,CAN I
1210 DATA 5040,ARE YOU,5050,WOULD YOU,5060,WHY DONT YOU,5070,WHY SHOULD I
1220 DATA 5080,WHY CAN I,5090,I DONT,5100,I FELL,5110,I WILL NOT,I WONT
1230 DATA 5120,I WILL,5130,I COULDNT,5140,I WANT,5150,I THINK
1240 DATA 5160,I WANT TO,5170,I WANT,5180,I LIKE,5190,I LOVE,5200,I WOULD
1250 DATA 5210,I HATE,5220,I WISH,5230,WHO,5240,WHAT,5250,WHEN
1260 DATA 5260,WHERE,5270,WHY,5280,HOW,5290,NEVER,5300,SOMETIMES
1270 DATA 5310,USUALLY,5320,ALWAYS,5330,MAYBE,5340,CAUSE
1280 DATA 5350,YES,5360,NO,5370,SAD,5380,HAPPY,5390,ANGRY,MAD
1290 DATA 5400,SICK,5410,SCARE,5420,DREAM,5430,PROBLEM,5440,LOVE
1300 DATA 5450,DOCTOR,BOSS,WIFE,HUSBAND,CHILD,SPOUSE,FATHER,MOTHER
1310 DATA 5460,FAMILY,KIDS,5470,MOVIE,5480,BOOK
1320 DATA 5490,POLITIC,5500,MUSIC,5510,SPORT,5520,MONEY,5530,COMPUTER
1330 DATA 5540,DEATH,5550,JOB,WORK,5560,SCHOOL
1340 DATA 5570,BYE
1350 DATA 5580,0

```

## NUMERIC KEYPAD DECODER ASSEMBLY LISTING

```

10 *$600
20 ; NUMERIC KEYPAD DECODER
30 ; (C) 1985 JEFF BRENNER
40 PORTA=54016
50 POT1=53761
60 TRIG0=53264
70 SETVBV=50460
80 XITVBV=50466
90 CH=764
100 FLAG=204
110 PLA
120 LDX #START/256 ; Load X with high byte of START.
130 LDY #START&255 ; Load Y with low byte of START.
140 LDA #7
150 JSR SETVBV ; Set vectors to point to START address.
160 RTS ; Return to BASIC.
170 START LDX TRIG0
180 BEQ PRESSED ; IF TRIG0=0 then key has been pressed.
190 DEX
200 STX FLAG ; Otherwise key is released - store zero in FLAG.
210 JMP END ; Jump to end.
220 PRESSED LDA FLAG
230 BEQ READKEY ; If FLAG=0 then last key has been released.
240 BNE END ; Ready to read next key.
250 READKEY INC FLAG ; Cannot read key yet - Jump to the end.
260 LDA PORTA ; Set flag to non-zero value since key is pressed.
270 AND #15 ; Check which key is pressed.
280 TAX
290 LDA POT1 ; Check if ESCAPE pressed.
300 CMP #1
310 BEQ NOESC ; If POT1=1 then ESCAPE was not pressed.
320 LDX #16
330 NOESC LDA DATA,X ; Load X with offset for ESC key.
340 STA CH ; Get data determined by X offset.
350 END JMP XITVBV ; Store data in keyboard code register.
360 DATA .BYTE 0 ; Exit vertical blank routine.
370 .END ; Data for keys stored after this address.

```

### Tinka's Mazes Continued from page 59

group of animals marches on to the screen and the program asks, "HOW MANY?" After answering this question, some more animals appear on the screen and the program asks,

### Applying The Atari Continued from page 60

designed with the help of a slightly modified version of last month's light pen program. You can press **START** at any time while this screen is being drawn to get to the next screen. Here you are asked if you want to record your conversation on

"NOW HOW MANY?" On all the skill levels, a correctly answered question is greeted with a high-pitched beep, while an incorrect answer is met with a low-pitched buzz and a "TRY AGAIN" prompt. If the child incorrectly answers two times in a row, the correct

a printer. It can be tremendously entertaining to look back at an entire conversation. Type **Y** or **N** for this prompt. If you don't have a printer, of course, you cannot get a printout--sorry.

Now **RAP** will give you a few introductory statements and will display the triangle prompt for your input. You

answer is displayed.

A correct answer opens the gate and allows the child to proceed through the maze. It is necessary to pass through nine of these gates for Tinka to get to school.

### At School

The school part of Tinka's

can say whatever you like; discuss a problem, talk about your fears, ask questions about the program itself, etc. **RAP** will do its best to respond to your statements. Remember, though, that **RAP** is just a computer program, so be forgiving with its occasional awkward grammatical use. There are a few "rules" to know when using **RAP**.

Mazes is almost a whole new program in itself. Your child can choose to stay in the classroom and take a mathematics quiz, or to go on a field trip on which skill reinforcing games are played.

The quiz is taken on a "blackboard" on the screen.

First, answer in one sentence at a time. Longer sentences are preferable since they give **RAP** more to work with. Unlike other BASIC artificial intelligence programs, there will not be any significant increase in the amount of time the program takes to respond with longer sentences. Since **RAP** uses a machine language subroutine to search your input

The type of quiz given once again depends upon the skill level being played. For example, the child may have to count a number of scissors, rocket ships, books, monsters, and other objects (Level 2), or he may have to add up

Continued on page 105

for key words, both short and long sentences will take approximately the same amount of time to be processed; about seven seconds. But don't go overboard; sentences longer than three lines will not be entered properly. Entering more than one sentence at a time or run-on sentences will make **RAP** more likely to give you a nonsensical response. Note that the screen goes blank while **RAP** thinks. This helps to speed up its response.

Second, **RAP** is more suited to understanding what you feel and what you do. It won't necessarily understand if you talk about what your brother-in-law is doing, for example.

Third, the speed with which **RAP** "types" out its characters can be changed by typing "SPEED=" followed by a number from zero through 30. Zero is the fastest speed and eliminates the "typewriter" effect. Numbers above 30, such as 4000, will make you wait days for a response, so keep the number under 30. **RAP** will print out a confirmation of the new speed. The speed of processing your responses is not affected; only the speed at which the characters are printed is changed.

Fourth, be careful of what you say to **RAP**. Computer circuitry is extremely sensitive. Have fun!

### Next Month

We'll learn all about the workings of **RAP** and how to add additional key words and responses. We'll also enter a few routines for June's *Mailing List* program, and we'll take a look at some more reader mail.

Reader's questions, comments and original contributions are welcome. Please enclose a self-addressed, stamped envelope (SASE) for a personal reply.

A cassette or diskette of the programs listed in this month's column is available from the author for \$7.00, postpaid. Specify DOS 2 or DOS 3; when requesting a diskette.

Program Perfect is a utility used to check for typing errors in programs entered from this column. Readers may send a SASE for a listing or \$5.00 for a cassette or diskette of this program.

Address all correspondence to:

Jeff Brenner's  
"Applying The Atari 9/85"  
c/o Computer Shopper  
P.O. Box F  
Titusville, FL 32781-9990

### RESPONSE ANALYSIS PROGRAM - PART II

IKJ 4760 DATA ARE, AM, WERE, WAS, YOU, I, YOUR, MY, IVE, YOU'VE, IM, YOU'RE, ME, YOU/  
ILJ 4770 DATA AM, ARE, WAS, WERE, I, YOU, MY, YOUR, YOUVE, I'VE, YOURS, I'M, YOU, ME/  
ILJ 4780 DATA OUR, YOUR, ME, YOU, YOURSELF, MYSELF, MYSELF, YOURSELF/  
KBJ 4990 DATA YOURS, MINE, MINE, YOURS/  
EBA 5000 DATA WHY DO YOU THINK I AM?  
RTA 5001 DATA HAVE YOU EVER WANTED TO BE?  
CTA 5002 DATA DO YOU REALLY BELIEVE THAT I'M?  
EPG 5003 DATA DO YOU KNOW ANYONE ELSE WHO IS?  
RTA 5010 DATA FOR HOW LONG HAVE YOU BEEN?  
NMA 5011 DATA ARE YOU WORRIED BECAUSE YOU ARE?  
NSA 5012 DATA DO YOU LIKE THAT YOU ARE?  
TFG 5013 DATA ARE YOU HAPPY THAT YOU ARE?  
UTA 5020 DATA DO YOU THINK I CAN?  
RTA 5021 DATA WHAT MAKES YOU WANT TO KNOW IF I CAN?  
OBH 5022 DATA ARE YOU ABLE TO?  
UMA 5030 DATA WHY WOULDN'T YOU BE ABLE TO?  
JMA 5031 DATA ARE YOU SURE YOU REALLY WANT TO?  
OEH 5032 DATA WHY DO YOU WANT TO KNOW IF YOU CAN?  
YEA 5040 DATA DOES IT REALLY MATTER IF I AM?  
CMA 5041 DATA WOULD YOU BE HAPPIER IF I WERE?  
COM 5042 DATA DO YOU OFTEN WONDER WHETHER OTHERS ARE?  
GMA 5050 DATA WOULD YOU BE PLEASED TO HEAR THAT I WOULD?  
GIA 5051 DATA I MIGHT JUST+.  
BLH 5052 DATA HOW WOULD YOU FEEL IF I WOULD?  
NIA 5060 DATA DO YOU REALLY WANT ME TO?  
VLA 5061 DATA WHY DO YOU FEEL THAT I DON'T?  
OSH 5062 DATA IT IS POSSIBLE THAT SOMEDAY I WILL+.  
AMA 5070 DATA CAN YOU THINK OF A GOOD REASON WHY YOU SHOULDN'T?  
SRI 5071 DATA HOW OFTEN DO YOU?  
DMA 5080 DATA ARE YOU SURE YOU WANT TO?  
EMA 5081 DATA WHAT MAKES YOU THINK YOU CAN'T?  
VBN 5082 DATA HAVE YOU TRIED TO?  
ISA 5090 DATA ARE YOU SURE YOU DON'T?  
FJA 5091 DATA IN YOUR OPINION, WHY DON'T YOU?  
NMA 5092 DATA DO YOU WANT TO?  
QMG 5093 DATA IS IT IMPORTANT THAT YOU?  
PFA 5100 DATA ARE YOU REALLY TRYING TO?  
TMA 5101 DATA TELL YOURSELF THAT YOU CAN+!  
CTH 5102 DATA IS IT SO IMPORTANT FOR YOU TO?  
KTA 5110 DATA WHY WON'T YOU?  
WVI 5111 DATA TELL ME WHY YOU WILL NOT+.  
NSA 5120 DATA YOU SEEM QUITE POSITIVE THAT YOU WILL+.  
IVI 5121 DATA HOW WILL YOU?  
SMA 5130 DATA WHY NOT?  
ATI 5131 DATA WHAT IF YOU WERE SOON ABLE TO?  
DMA 5140 DATA HOW LONG HAVE YOU BEEN FEELING+?  
NMA 5141 DATA DO YOU WANT TO CONTINUE TO FEEL+?  
ALA 5142 DATA HOW ELSE DO YOU FEEL?  
SLG 5143 DATA DO YOU FIND THAT YOU OFTEN FEEL+?  
DMA 5150 DATA HAVE YOU ALWAYS THOUGHT THAT?  
TUA 5151 DATA HOW DO YOU FEEL ABOUT THESE THOUGHTS?  
WTH 5152 DATA WHAT ELSE DO YOU THINK?  
ETA 5160 DATA DO YOU TRULY WANT TO?  
NA 5161 DATA ARE YOU SURE YOU CAN+?

JKA 5162 DATA WHAT MAKES YOU WANT TO+?  
JSE 5163 DATA WOULD YOU BE HAPPY IF YOU GOT TO+?  
DTA 5170 DATA WHAT IF YOU CAN'T GET+?  
IVA 5171 DATA IS THAT WHAT YOU REALLY WANT?  
RTA 5172 DATA HOW WOULD YOU FEEL IF YOU SUDDENLY GOT+?  
JMG 5173 DATA DON'T OTHERS ALSO WANT+?  
KMA 5180 DATA HOW OFTEN DO YOU GET TO+?  
KEI 5181 DATA WHAT WOULD YOU GIVE TO+?  
IRA 5190 DATA WHEN DID YOU DECIDE YOU LOVE+?  
SJA 5191 DATA IS THAT LOVE REAL?  
DSH 5192 DATA HOW MUCH DO YOU LOVE+?  
SKA 5200 DATA WOULD YOU REALLY?  
NI 5201 DATA WHY WOULD YOU+?  
TMA 5210 DATA SINCE WHEN HAVE YOU DISLIKED+?  
TMA 5211 DATA HOW STRONGLY DO YOU HATE+?  
NMA 5212 DATA YOU THINK IT IS HEALTHY TO HATE+?  
PMA 5220 DATA I'M SURE OTHERS ALSO WISH+.  
PJA 5221 DATA WOULD THAT MAKE YOU HAPPY?  
LWH 5222 DATA PERHAPS YOUR WISHES WILL SOON BE FULFILLED.  
YTA 5230 DATA WHO DO YOU SUPPOSE+?  
DWI 5231 DATA I'M NOT SURE I CAN TELL YOU WHO+.  
UMA 5240 DATA WHAT DO YOU THINK+?  
NTI 5241 DATA DO YOU THINK I KNOW WHAT+?  
OTA 5250 DATA I CAN'T KNOW EXACTLY WHEN+.  
VEI 5251 DATA WHEN DO YOU THINK+?  
FTA 5260 DATA I WOULDN'T KNOW WHERE+.  
NDI 5261 DATA DO YOU KNOW AT ALL WHERE+?  
AMA 5270 DATA I COULDN'T TELL WHY+?  
TAI 5271 DATA WHY DO YOU THINK+?  
VLA 5280 DATA DO YOU WONDER HOW+?  
YKI 5281 DATA DO YOU EXPECT ME TO KNOW HOW+?  
FCA 5290 DATA NEVER AT ALL?  
SMA 5291 DATA WHY NOT?  
SFH 5292 DATA GIVE IT SOME TIME.  
CMA 5300 DATA DO YOU WISH IT WERE MORE OFTEN?  
LSA 5301 DATA HOW OFTEN WOULD YOU SAY?  
LIM 5302 DATA WOULD YOU RATHER NEVER+?  
JJJ 5310 DATA HOW OFTEN NOT?  
FAJ 5320 DATA ALL THE TIME?  
AKA 5330 DATA YOU ARE APPARENTLY UNCERTAIN.  
CJA 5331 DATA DO YOU KNOW FOR SURE?  
RFA 5332 DATA COULD YOU BE MORE DEFINITE?  
TKS 5333 DATA I WISH YOU WOULD BE CERTAIN.  
CIA 5340 DATA IS IT REALLY BECAUSE+?  
KLI 5341 DATA IS THAT THE ONLY REASON - BECAUSE+?  
OCA 5350 DATA ARE YOU CERTAIN?  
DMA 5351 DATA THAT MAKES SENSE.  
DMA 5352 DATA YOU'RE POSITIVE?  
ETA 5353 DATA TELL ME MORE.  
KSA 5354 DATA I SEE.  
RGE 5355 DATA NOW I UNDERSTAND.  
DMA 5360 DATA REALLY?  
SUA 5361 DATA WHY NOT?  
SKA 5362 DATA I UNDERSTAND.  
HOG 5363 DATA WHY DON'T YOU THINK SO?  
NSA 5370 DATA NOBODY LIKES TO BE UNHAPPY.  
DNI 5371 DATA HOW DO YOU THINK THIS SADNESS COULD BE ELIMINATED?  
JDA 5380 DATA WE'RE ALL LOOKING FOR HAPPINESS, RIGHT?  
JFI 5381 DATA WHAT HAS MADE YOU REALLY CONTENT RECENTLY?  
DMA 5390 DATA IT'S UNHEALTHY TO BE ANGRY OFTEN.  
KJA 5391 DATA WHAT DOES ANGER DO TO YOU?  
NMA 5392 DATA SOMETIMES WE LOSE CONTROL WHEN WE ARE ANGRY.  
JDA 5400 DATA PERHAPS SOMEDAY WE WILL ELIMINATE ILLNESS.  
SMA 5401 DATA HOW WOULD YOU DESCRIBE THIS ILLNESS?  
NMA 5402 DATA LET'S HOPE FOR A SPEEDY RECOVERY.  
MAI 5410 DATA TELL ME ABOUT THESE FEARS.  
NII 5411 DATA WHAT ELSE WOULD BE SCARY?  
DMA 5420 DATA LET'S DISCUSS THESE DREAMS.  
TNI 5421 DATA DOES THIS DREAM MEAN ANYTHING TO YOU?  
JMA 5430 DATA EXACTLY WHAT KIND OF PROBLEM?  
TLI 5431 DATA HOW DO YOU FEEL ABOUT THESE PROBLEMS?  
SGA 5440 DATA LOVE IS A POWERFUL EMOTION.  
VMA 5441 DATA TELL ME MORE ABOUT THIS LOVE.  
FUM 5442 DATA WHAT DOES THIS LOVE MEAN TO YOU?  
LMA 5450 DATA LET ME HEAR MORE ABOUT THIS PERSON.  
OLA 5451 DATA WHAT DO YOU REALLY THINK ABOUT THIS PERSON?  
OTA 5452 DATA WHAT COMES TO YOUR MIND WHEN YOU THINK OF THIS PERSON?  
ENG 5453 DATA WHAT WOULD YOU CHANGE ABOUT THIS PERSON?  
JMA 5460 DATA WHAT ELSE SHOULD I KNOW ABOUT YOUR FAMILY?  
WAI 5461 DATA COULD YOUR FAMILY CHANGE TO MAKE THINGS BETTER?  
DMA 5470 DATA WHAT MOVIE HAVE YOU SEEN MOST RECENTLY?  
PUI 5471 DATA I TAKE IT YOU USUALLY ENJOY MOVIES?  
DMA 5480 DATA HOW OFTEN DO YOU READ?  
DMA 5481 DATA WHAT BOOK WOULD YOU RECOMMEND FOR ME (IF I WERE HUMAN)?  
JMA 5482 DATA TELL ME ABOUT YOUR FAVORITE BOOK.  
SMA 5490 DATA DO YOU WANT TO TALK SERIOUSLY ABOUT POLITICS?  
NDI 5491 DATA LET'S HEAR YOUR POLITICAL VIEWS.  
PIA 5500 DATA HOW IMPORTANT IS THIS MUSIC TO YOU?  
TFA 5501 DATA DO YOU HAVE A FAVORITE SONG?  
YTH 5502 DATA TELL ME MORE ABOUT THIS MUSIC.  
KTA 5510 DATA DO YOU LIKE PLAYING OR WATCHING THAT SPORT?  
ONI 5511 DATA ARE YOU A FAN OF ANY PARTICULAR TEAM?  
SIA 5520 DATA IT SEEMS LIKE EVERYONE'S AFTER MONEY.  
FMA 5521 DATA IS MONEY THAT IMPORTANT TO YOU?  
BMA 5522 DATA LIFE IS INDEED MORE THAN MONEY.  
LMA 5530 DATA I HOPE YOU'RE NOT REFERRING TO ME IN ANY WAY.  
DMA 5531 DATA HAVE COMPUTERS AFFECTED YOUR LIFE SIGNIFICANTLY?  
JMA 5532 DATA HAVE YOU FEARS OF COMPUTERS.  
NMA 5540 DATA GIVE ME YOUR IDEAS ON DEATH.  
REA 5541 DATA WOULD YOU TAKE THE OPPORTUNITY TO LIVE FOREVER?  
GMA 5542 DATA WE BECOME MORE REALISTIC ABOUT DEATH AS WE AGE.  
PIA 5550 DATA DO YOU KNOW MANY PEOPLE WHO ENJOY THEIR JOBS?  
NTI 5551 DATA TELL ME MORE ABOUT THIS WORK.  
DMA 5560 DATA WHAT WOULD YOU CHANGE ABOUT THIS SCHOOL IF YOU COULD?  
EII 5561 DATA HOW DO YOU REALLY FEEL ABOUT THIS SCHOOL?  
UJ 5570 DATA IT'S BEEN A PLEASURE TALKING WITH YOU.  
HVA 5580 DATA TELL ME MORE.  
SMA 5581 DATA THAT IS INTERESTING - GO ON.  
GTA 5582 DATA LET'S HEAR ALL ABOUT IT.  
PMA 5583 DATA EXPLAIN FURTHER.  
HTA 5584 DATA AND WHAT DO YOU THINK ABOUT THAT?  
VMA 5585 DATA I DON'T UNDERSTAND.  
KEA 5586 DATA WHAT ELSE SHOULD I KNOW?  
CJC 5587 DATA YOU SEEM UNCOMFORTABLE WITH THIS TOPIC.  
FSI 5590 DATA END

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# Digital Vision, Inc. Announces Video Acquisition System For Atari Computers

Digital Vision, Inc., announces the introduction of **COMPUTEREYES**, the company's ultra-low-cost video acquisition system for the Atari 800, 800XL, and 130XE series of personal computers. Priced at only \$129.95, **COMPUTEREYES** represents the first cost-effective means of capturing real-world images on the Atari's high resolution graphics display. And for just \$399.95, a complete system including **COMPUTEREYES**

and a high-quality video camera is available.

**COMPUTEREYES** is an innovative slow-scan device that plugs into the Atari's two Game Ports and easily connects to any standard video source (videotape recorder, video camera, videodisk, etc.). Under simple software control, a b/w image is acquired in less than six seconds. A unique multi-scan mode also provides realistic grey-scale images. The accompanying images are

printer screen dumps of images acquired by the system.

Many of the applications of **COMPUTEREYES** are obvious. These include pattern recognition, security, quality control, spatial measurement, robotics and artificial intelligence, industrial controls, computer art, education, and entertainment. Other applications are bound to surface, once the product is in the hands of the creative members

of the personal computer community.

Comprehensive software is provided with the system and includes: machine language image capture routines; a menu-driven executive that provides everything even first-time users need to capture images; and image save-to-disk capability. Images can be acquired in either Graphics B (high-resolution) Mode or Graphics 7.5 (four intensity level) Mode, and are thus compatible with such popular image processing programs as Atari Artist and the Koala Pad. Support for other packages, such as Print Shop, will be available soon. To encourage application development and promote ease of use, the software is not copy-protected.

The **COMPUTEREYES**

package includes interface module, complete easy-to-use software support on disk, owner's manual, and one year warranty. The system is currently available for the Atari 800/800XL/130XE series, with single- or double-density disk drive. **COMPUTEREYES** is the Atari version of Digital Vision's successful video acquisition system for Apple II series and Commodore 64/128 computers. All products are available for immediate delivery. Versions for other popular computers will be available in the near future.

For further information, please contact: Digital Vision, Inc., 14 Oak Street, Suite 2, Needham, MA 02192, (617) 444-9040 or (617) 449-7160.

Mention that you read about it in the *Computer Shopper*. •

## Tinka's Mazes

Continued from page 104

numbers presented on the blackboard (Level 3). On any of the levels, the "teacher" rewards correct answers by doing a dance, and nods disapprovingly when an incorrect answer is given. Getting all ten answers correct makes the teacher dance, jump in the air, or flip her wig.

## Field Trip

On the field trip, the child can select to play one of five animal games, with elephants, mice, bees, crabs, or fish. The games are intrinsically the same except that the animals, and the actions of the animals, are different. Each game exercises the concepts that the particular skill level is trying to reinforce. On level two, for instance, a group of elephants, mice, bees, crabs or fish is displayed and the child is asked "WHAT NUMBER COMES NEXT?" Typing the number that follows the displayed quantity of animals is rewarded with the elephants joining tails, the mice scurrying away at the sight of a cat, the bees buzzing in, the crabs waving their claws, or the fish blowing bubbles.

## Packaging and Documentation

All the Tink!Tonk! programs are packaged in an at-

tractive hard-plastic case. The 24-page documentation booklet is excellently written and thorough, explaining each skill level in a separate section. A "Game Plan" section gives helpful hints on playing the game, and a unique "Off-Screen Activities" section recommends activities you can perform with your child to reinforce the skills presented in Tinka's Mazes.

## Conclusions

My only complaints of Tinka's Mazes concern the several-second loading delay which takes place between screen changes and an occasional annoying repetition of short tunes. Aside from this, Tinka's Mazes is a well-designed educational program. The educational concepts are presented with animated graphics in a game-form that children enjoy. And the varie-

ty of skill levels ensures that your child will get good use out of the program.

## Requires:

Atari 400/800/XLIXE: 48K, disk drive

Commodore 64: Disk drive 1 Joystick (optional)

Program author:

Mercer Mayer

Price: \$39.95

Warranty:

90 days, free replacement

Manufacturer:

Mindscape, Inc.

3444 Dundee Road

Northbrook, IL 60062

## RATINGS FOR TINKA'S MAZES

\* POOR, \*\* FAIR, \*\*\*

GOOD, \*\*\*\*EXCELLENT

Design \*\*\*

Amusement level \*\*\*

Documentation \*\*\*\*

Value \*\*

Average \*\*\*



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# Page Designer

by Jeff Brenner

\*\*1/2

Page Designer, a new release from XLENT software, allows the user to combine various type fonts and graphics to create signs, report covers, letterheads and the like. Sounds familiar? Shades of Broderbund's The Print Shop? Michael Barnes, Vice President of XLENT Software, says that Page Designer was produced independently of The Print Shop, however, he suggests that my readers might "be interested in a list of features of the \$45.00 Print Shop compared to the \$29.95 Page Designer."

While Page Designer and The Print Shop appear similar from their general descriptions, the differences between the two are great and many. Therefore, one will probably suit your particular needs much more effectively than the other. This review will cover the features of Page Designer and its advantages and limitations when compared with The Print Shop.

## What You See Is What You Get

One of the nicest features of Page Designer is that its display shows you almost exactly what you are going to get on the printed page. There is little need to question about positioning or overlaying characters onto illustrations since you put everything where

you want it. All is not completely marvelous, however, since Page Designer can't fit an entire page onto one graphics screen. It allows you to see and design the whole page by using a top and a bottom screen. You can only view or work with one of these screens at a time, but you can freely go back and forth between the two. I did run into a few problems with

this two-screen design, however, which you shall soon hear about.

## Numerous Type Styles

Included on the Page Designer disk are seventeen character fonts. That's a generous selection, although a few of the fonts look like duplicates of others, with

maybe a few indistinguishable nuances. Unlike the fonts offered by The Print Shop, Page Designer's character sets support lower-case letters.

## Merging Graphics

Here's where Page Designer has another advantage. Screens

Continued on page 154

## Weber Systems' Continued from page 148

DOR.BAS and CHECK.BAS for maintaining a file of vendors and generating checks in an account payable package.

Disk #4 contains CUSTOMER.BAS and INVENT.BAS in an accounts receivable package. Product inventory includes a description, stock number, quantity on hand, quantity on order and unit price.

Disk #5 is a mailing list program called FLIPFILE.BAS. It stores addresses and phone numbers, and prints any or all on labels or as a list.

Disk #6 contains a number

of programs. Chart of Accounts (CHARTACC.BAS) holds account name, number and description for up to 1000 entries, sorts them, then prints them as a list or on labels.

PHONE.BAS is a computerized phone directory of addresses and phone numbers, for printing as a list or labels.

BREAK.BAS provides a break-even analysis to determine the price that should be charged for a product, using information you supply. It calculates the number of production units required to crossover from loss to profit—the break-even point.

METRIC.BAS calculates metric conversions, and

FUNCTS.BAS provides a wide range of trigonometric and hyperbolic math values.

The appendices include some information from the MBC User's Handbook—a table of character codes and four pages of BASIC error messages, with their meaning and causes.

I have mixed feelings about these programs. I ran MEMOPAD without difficulty, but found FLIPFILE crashed when initialized with the 1600 records the text indicated were allowed. I was able to initialize 1000 records, then found that only three structured lines were allowed per label—with no room for a

company name. Also, the record listing used three lines, just like a label, rather than the single line per record you might expect. I haven't tried the other programs at this writing, but suspect the 1600 records claimed in the text for many programs may not be available with one double-sided 360K disk.

The listings are well commented with remarks and are listed in structured fashion, making them relatively easy to follow (and therefore modify). Most of the programs make extensive use of random disk files, and can be used as a tutorial for this purpose.

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# PAGE DESIGNER FROM XLENT SOFTWARE

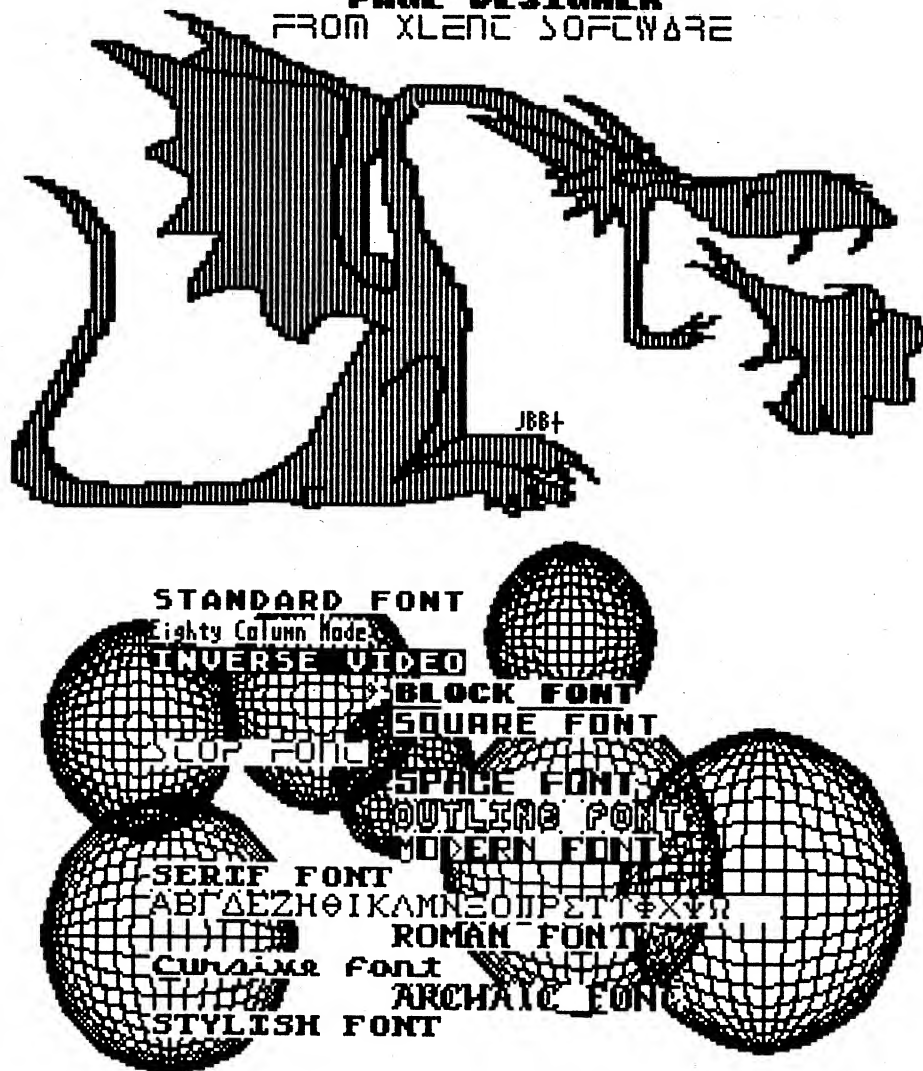


FIGURE 1

## Page Designer Continued from page 151

created with a graphics software package (such as MicroPainter or MicroIllustrator files converted with an included conversion routine) can be loaded into Page Designer and placed on the top or bottom half of the page. You can then add text to this illustration in various type styles as you please. The illustration, as well as any text, can be moved left or right one text-height line at a time by using the insert and delete keys. However, there is no way to move the image up and down, which is a shame; the program does not respond to the SHIFT-INSERT and the SHIFT-DELETE key combinations. Moving the screen up or down would not have required any overwhelming programming effort, yet would have given the user an enormously useful feature. As it is now, an illustration which starts at the top of the screen cannot be moved down if you wanted to add text above it.

### Adding Text

Text is positioned on the screen using the conventional Atari editing system, except the SHIFT-INSERT and SHIFT-DELETE key combinations

are not recognized, as mentioned previously.

To change the type style, a new character set must be loaded in. You can either specify the name of the file containing the character set you want, or you can select a font while directory entries are printed out one at a time. Once a new character set is loaded in, all subsequently typed characters appear in the new type style.

Whereas The Print Shop offers large characters in a variety of sizes, Page Designer only offers small sized characters in two sizes: 40 or 80 characters per line. The 80 character per line mode basically compresses the characters. While the documentation admits that the 80 characters per line mode looks blurry on the screen, it says nothing about how ugly the compressed characters look on the printed page. I would recommend sticking to the 40 character per line mode if you want legible text.

### Special Graphics

A special graphics font can be activated with a control command. This character set contains characters that may be linked together to form pat-

Continued on page 156

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## Page Designer

Continued from page 154

terms, borders, screen designs, etc. The only problem with linking these characters is that the screen lines are spaced one scan line further apart than they should be. The result is that "connected" characters appear disconnected. The only way around this is to continuously use two other commands which move the text cursor one scan line above or below its current position, but this is time-consuming and nerve-racking, especially if you planned to put these characters over a wide area of the screen.

### Graphics Mode

Another mode of this pro-

gram allows you to use the joystick to make free-hand drawings on the screen. Line, circle and sphere drawings are supported, but that's all. Furthermore, you can't draw a line, circle or sphere from the top half of the page to the bottom, or vice versa. This could be a serious limitation if you planned to do lots of drawing in the middle of the screen. Using a separate graphics program is of no help in this regard since only one half of the screen is created at a time. You can, of course, switch between top and bottom screens and carefully plan out how they will connect, but this is probably more trouble than it's worth.

Page Designer could have solved these problems by using a scrolling screen that would

allow you to scroll up and down the page and draw, type and load screens anywhere along the way. This would have been an excellent and handy feature.

### The Printed Page

Figure 1 shows an example of a page created with Page Designer. Note the wide variety of type styles. The small print size enables more text to fit on the page, however it also means that each character is composed of fewer pixels. The result is that Page Designer's graphics seem more "chunky." That is, the individual pixels composing each character are more visible.

Continued on page 160

## First Gem Applications From Digital Research Bring Graphic Interface To IBM PC Software Packages

Digital Research Inc. announced its first end-user application programs that take full advantage of the Graphics Environment Manager (GEM) operating system extension--GEM Desktop and GEM Draw. The company also announced two new GEM software applications--GEM Paint and GEM Write--which will be bundled as the GEM Collection with GEM Desktop.

GEM Desktop and GEM Draw bring to the entire line of IBM Personal Computers and compatibles drop-down menus, windows, icons and support for a mouse pointing

device, ideas pioneered on the Xerox Star and popularized on the Apple Lisa and Macintosh. Other GEM-based programs will be announced by Digital Research in the third and fourth quarters of 1985.

"Now that applications with the GEM user interface are available, those who do not want to learn the complicated commands that typify the majority of IBM PC applications will be able to use personal computers," said John Rowley, president of Digital Research. "With these applications, we are beginning to open up the personal computing world to all of business America."

### GEM Desktop

GEM Desktop eliminates the need to learn complex operating system commands by replacing them with a visual and intuitive interface. On machines equipped with GEM and GEM Desktop, a graphical representation of a desktop equipped with disks, a waste basket and folders appears. Simply by moving the mouse and clicking the mouse button, or by making simple key strokes, the user can open a file, run a software program, delete a file or do anything else possible under the operating system.

Up to six GEM Desktop accessories, such as a calculator or a clock, can run with other GEM applications.

### GEM Collection

For those wishing to try out a range of GEM applications, Digital Research offers the GEM Collection. The GEM Collection includes GEM Desktop, GEM Paint, an on-screen graphics design tool, and GEM Write, a full-function word processor. •



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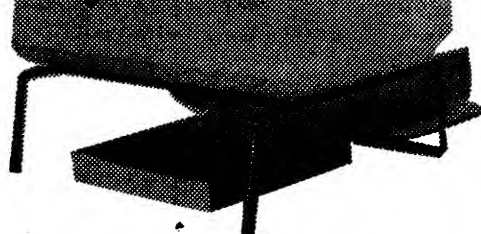
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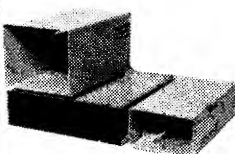
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### Page Designer Continued from page 156

#### Documentation

I was sent "Preliminary Documentation" with this program, which means that I had to figure out how to use several of the commands by myself. Hopefully, the final documentation will be better written and more complete. Since I don't have the actual documentation, I am not including a rating for this category.

#### Conclusions

Page Designer is a handy

utility, particularly useful for merging your own graphics and text and when lower-case characters are essential. For designing signs, greeting cards, stationery, and other items where large, highly readable print is desired, I would still recommend The Print Shop. User-friendliness is where Print Shop really excels over Page Designer. Indeed, the creators of The Print Shop have done such a magnificent job with its user interface that Page Designer seems clumsy, complicated and tedious in comparison. Hence, the neophyte

Atari user would find himself much more comfortable using Print Shop than Page Designer. For the more experienced, though, Page Designer has features that make it an attractive package in itself.

#### Requires:

Atari 400/800/XL/XE  
1 Joystick

#### Program Author:

Dennis Young and  
Len Dorfam

Price: \$29.95

#### Warranty:

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#### Manufacturer:

XLENT Software  
P.O. Box 5228  
Springfield, VA 22150

#### Ratings For Page Designer

\*POOR, \*\*FAIR, \*\*\*GOOD,  
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Program Design \*\*

Practicality \*\*\*

Value \*\*\*

Average \*\*1/2

### New Modem Continued from page 158

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		2225 Hz = mark	1270 Hz = mark

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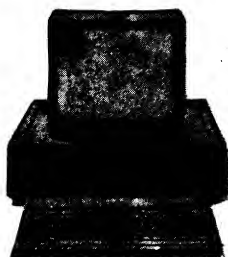
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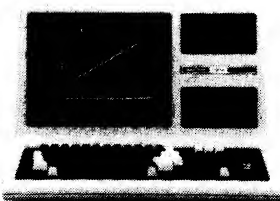
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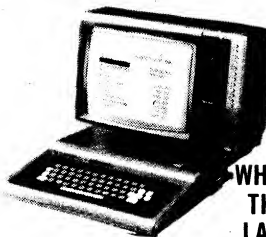
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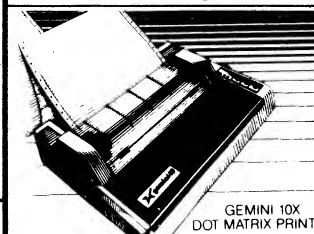
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